



2013

Dunmire, Irvin Dale Oral History Interview -

Ed Pejack

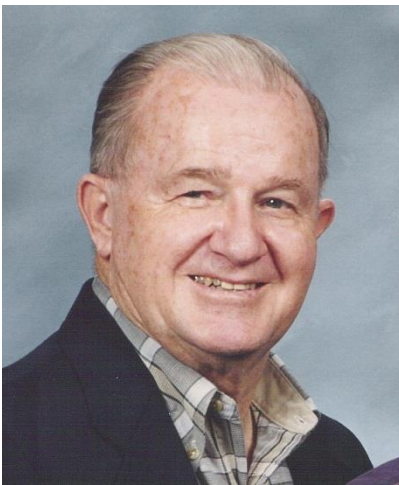
Follow this and additional works at: <https://scholarlycommons.pacific.edu/esohc>

Recommended Citation

Pejack, Ed, "Dunmire, Irvin Dale Oral History Interview -" (2013). *Emeriti Society Oral History Collection*. 45.
<https://scholarlycommons.pacific.edu/esohc/45>

This Book is brought to you for free and open access by the University Archives at Scholarly Commons. It has been accepted for inclusion in Emeriti Society Oral History Collection by an authorized administrator of Scholarly Commons. For more information, please contact mgibney@pacific.edu.

FACULTY EMERITI INTERVIEWS
UNIVERSITY OF THE PACIFIC ARCHIVES



Dunmire, Irvin Dale
Professor of Electrical Engineering, Department Chair
(1974-1990)

February 1, 2013

By Ed Pejack

Transcription by Mark Linden, University of the Pacific,
Department of Special Collections, Library

Subjects: Electrical and computer engineering, Dean Robert Heyborne, influence of Regent Ted Baun, Family atmosphere in Engineering Department, rapid changes in curriculum, growth in department, introduction of computers and microcomputers, beginning of Masters in Electrical Engineering, faculty in the Department.

PEJACK: This is Ed Pejack former faculty member of The School of Engineering. I am interviewing (Irvin) Dale Dunmire. Today is February 1st 2013. We are doing the interview in the Fluids Lounge of the School of Engineering and Computer Science. Dale what years did you serve at the University and what was your title while you were here?

DUNMIRE: I came to UOP in 1974 and I retired in 1990. During that time I was Chair of Electrical Engineering, which changed over the years and became Chair of Electrical and Computer engineering.

PEJACK: Dale what was the reason that brought you to UOP in the first place?

DUNMIRE: Dean Robert Heyborne, who was the Dean at the UOP School of Engineering, contacted me. I had been at Utah State University, and he asked me if I would be interested in coming to UOP to become the Chair of Electrical engineering. Bob Heyborne had worked with Arnold Finchum at USU, and Arnold was the present Chair of Electrical Engineering at UOP. He had just resigned to further his education. I had completed my PhD at Arizona State University. Bob was aware that Arnold and I had taught together at USU. I knew of Bob Heyborne as I had met him when he was leaving USU to go to Stanford to study for his PhD. They decided together that I would be an appropriate Chair of the Electrical Engineering Department here at UOP.

PEJACK: Now Dale, Utah is pretty far away from Stockton, so when you were relocated here to UOP and to the city of Stockton, what were you impressions at the time?

DUNMIRE: Well I must say I was somewhat concerned when I heard about the opening because I hadn't spent time in California. I had interviewed for a job in Los Angeles and was naively under the impression that all of California was like Los Angeles. I had an aunt and uncle that had lived in Stockton for years and had seen them as they passed through our home from time to time. So I knew of Stockton but very little. So my impressions began with the talks that we'd had with my uncle and aunt. We were concerned when we landed at the airport and came in from the south. The Dean had warned us not to let our first impressions influence our overall thoughts of the city. Our impressions changed for the better as we became acquainted with the people and Bob and Denise (Bob's Wife) were great hosts and hostesses for us. Carlynn, (my wife), came with me and we stayed at the Western hotel at the port. As we became more acquainted with the area and the people we met, we began to enjoy what we saw. Stockton is not Los Angeles. The area around the University is a nice community and we enjoyed it. We enjoyed what we saw.

PEJACK: Do you recall anybody at Pacific you especially remember when you started Pacific?

DUNMIRE: Bob Heyborne was our main contact when we began considering UOP and so I don't believe anyone else that we met influenced us more than he did. The first person that I interviewed was Floyd Helton in the Mathematics Department. Floyd was a very serious individual and we had a good talk. There wasn't a lot of time to meet people except for Bob and Denise who influenced our first impressions of Pacific a great deal. I was impressed with the physical appearance of the university; it was nice but small compared to Utah State University. Bob kept talking about the family atmosphere and about the small classes, and when I came I could park right out in front of Baun Hall and walk into my office from there. We didn't meet many of the students at that time, but we met a few of the administrators but my memory doesn't serve me well in recalling their names. Vern Harrison was the chair of The Civil Engineering Department. I think there were just the two departments, Civil and Electrical. I don't remember if Management Engineering was a part of the curriculum. Vern and I had shared an office. We both had our desks back to back in the back of Baun Hall and Vern was a nice person to talk with and really helped a lot in my first days at the School of engineering.

PEJACK: Your field of electrical and computer engineering, to put it mildly has undergone a revolution in the last several decades. How did you see the curriculum changing and programs at UOP that you had to develop for the department?

DUNMIRE: Well you're right, things changed very rapidly during that time. Curriculum changed drastically. There was rapid growth in the Electrical Engineering Department and class sizes. I remember some classes of maybe four or five students at first but that didn't last for long. We had one laboratory in the basement of Baun Hall, and there were six benches and very little equipment. The equipment was built from Heathkits and World War II surplus. They were minimal but Bob Heyborne had indicated we would have money to improve the laboratory soon and that did come to pass, thankfully.

PEJACK: Did you have any kind of mandate to enhance the education and academic program? What was the toughest challenge you had in that area?

DUNMIRE: Well of course the laboratories were one of our pressing difficulties. We didn't have a specific mandate but we knew we had to keep up with the changes in our fields. During that time the fields were changing so rapidly and there was a high interest in computers and computer science. We decided we would add computer engineering to our curriculum. One of my faculty members, Ron Pullyblank was instrumental in assisting in the development of this program. When I came, the University's only computer was in the back basement of Baun Hall. It was programmed with IBM cards. It was soon moved from there to the health building on the north campus behind the pharmacy school. That changed things. We had to program with the IBM punch card machines that were left in Baun Hall and then carry them over to the basement of the health department to run the programs which took a lot of time. As things changed we

decided we needed to bring microcomputers into our program. So Ron Pullyblank and I took a course in microcomputers that was being taught by Lawrence Livermore engineers in Walnut Creek. I think it was three days a week for the fall term in the evening 7 to 9 pm. When we had completed the course we decided to conduct a one month winter term course in microcomputers and opened it to anyone who was interested. There was good interest in the course across the campus, as many as 20 to 25 people took the class. We had a good time. That was our introduction to teaching computers. You might say our computer engineering instruction began at that point.

PEJACK: Some of that stuff like the card puncher would be considered antiques now.

DUNMIRE: Yes, that's for certain.

PEJACK: Dale you were department head so you had to be reporting to administrative people above and had people reporting to you. Say something about your method of communication and your management philosophy.

DUNMIRE: Well my thinking goes something like this. I considered the department a helicopter with many propellers. We were trying to hover over a particular spot, and everyone's propeller had to turn just right to keep our programs over the spot. We communicated mainly by our faculty meetings and by memos and so on and so forth. Things have changed so much; it's hard to believe how archaic it was at that time. We did not have a department secretary. The only secretary in the school of engineering was Bess Ayers in the dean's office who did a great job with so much responsibility. I believe there was a secretary in the co-op office, Dorothy Lee. So anything we wanted typed we had to submit to Bess or Dorothy and provide plenty of time for them to complete its preparation.

PEJACK: Your analogy to the helicopter is interesting. I suspect that you had to function as a tail rotor so to speak... in the department.

DUNMIRE: You might say that was my function. At this point I'd like to list some people who reported to me over the course of my tenure. My memory is not as it once was but as I recall when I arrived, there was Thuan Nguyen, Gordon North, and Richard Harris. We added Robert Burger, Dave Besch, Terry Dwan, Fred Cleveland, George Hankins, Brian Peterson, Ronald Pulleyblank, George Schroeder and Dick Turpin. All these faculty members had a significant impact on the Department and my tenure here at UOP.

PEJACK: Dale in thinking about the University community at large, in what way did you interact with that community.

DUNMIRE: At the time the University faculty was close and it had a family atmosphere. Bob Heyborne talked about that during my interview, and it was true. Bob Hamernik also talked of that aspect of the University. There were also a number of people who influenced my thinking here in terms of the University community. Roland DiFranco in the Mathematics Department, Andres Rodriguez in the physics department as well as Bob Anderson in the Provost's office.

PEJACK: Of the administrative things that you've been involved with, which ones worked the best and which ones worked the least? Which was enjoyable to work on?

DUNMIRE: Because the electrical engineering faculty was small in the beginning, administration was fairly easy and productive. It was easy to get the Faculty together, and fairly easy to go around to their various offices and discuss problems. That was enjoyable. As time went on it became more difficult to interact with everyone, and it had to become more formalized. I certainly enjoyed all these colleagues that I worked with. I enjoyed advising in general, and the one thing I found least enjoyable was getting ready for our accreditation visits. At the time it was for the Engineering Council for Professional Development. ECPD, our national accreditation society for all engineering programs that time.

PEJACK: Pacific has a pretty comprehensive committee structure that helps with University governance. Did that have any effect on your own work and productivity?

DUNMIRE: It certainly did. As a chairman of the department it seemed that I got involved in a lot of committee activities. Of course because we were a small school, everyone had to take more than their fair share of the committee work, both in the school and across the campus. It certainly took time away from teaching, advising and other academic activities which was required for academic growth. I don't know of a better way of administrating the activities that cause the University to function appropriately, so that's just part of the structure.

Ed, You asked me about the alumni or the donors to our programs. Ted Baun was one of the graduates of engineering at UOP. He was a regent who had a great influence on our school. I had talked to Ted a number of times and remember when he came to me and wanted to know how much money it would take to put a laboratory full of computers in the school. This must have been during the middle 80's. He was willing to put enough money into a computer laboratory so that we could begin teaching courses which required many computers.

PEJACK: Hearing you say that about Ted, I can still remember a day when Ted was doing a walk through around the Engineering school to see where he might use some money. I was teaching graphics in Khoury with T square, pencil and paper using AutoCAD because one day a salesmen from AutoCAD came over here and said he give us a free AutoCAD software package. It was worth about 2,000 dollars. I said, Okay, I'll take it, and I had it in the back of the graphics lab, way in the back, and the whole laboratory was filled with drafting tables. Ted came up and he

was looking over the students, you know, looking over their shoulder, and then he sat down at that terminal with the AutoCAD. He said what's this? I showed him. You draw a few lines here, you change the color here and you change or moved the line here. He was impressed. He said I like this. I want to get this for the whole laboratory and that's how we went from drafting boards to AutoCAD.

DUNMIRE: It was probably just before that we were having a problem deciding which computer to commit to. Because some faculty liked the apple computer and others liked the IBM.

PEJACK: Yeah, you may not know we ended up getting Hewlett Packard for the graphics lab.

DUNMIRE: Yes, I knew since I participated in that decision. I was working with an upper level management person at Hewlett Packard to get equipment gifts for the Electrical and computer engineering program on an ongoing basis.

PEJACK: Anyway, when I edit my talk I'm going to put that in there about Ted.

DUNMIRE: I think that's a good idea.

PEJACK: We didn't have to do much with administrators above the dean. What programs at Pacific do you feel were particularly significant especially for your department?

DUNMIRE: Well, our primary focus in the beginning was electrical engineering, but we started the computer engineering department. Then we brought in engineering physics. Certainly the mechanical engineering program influenced our programs a lot when it came along. Some of our students moved from electrical into the mechanical engineering. Certainly co-op influenced all of our programs. When Larry Hill was administrator of that program we all benefited. At this point I need to talk about my son's reaction to the School of Engineering. When I was interviewing for the position at UOP, my son was a senior at a high school in Logan Utah, and when he read the catalog and heard the discussion about the School of Engineering, he told me that he was going to UOP, no matter what my decision was concerning our moving here. That provides his impression of UOP. One of the things I accomplished during my tenure was the master's program in Electrical engineering which the administration and particularly Dean Heyborne wanted to see started in the school. It took a lot of effort to bring that program into being. We had the idea that we could involve some local industry to bring in funds to support student projects. The one big problems was there wasn't money built into the school budget for the program.

PEJACK: Not everybody agreed on which direction to head. Any of those that you recall and who was involved in those...

DUNMIRE: One of the controversies that I remember discussed was football and how that a negative influence on all the academic programs at UOP. It soon became clear that because of the cost of the football program that it was affecting all university activities. I liked football and we had season tickets. Carlynn and I liked being involved so we could get out in the fine fall weather in Stockton, but I soon became convinced that the program was costing too much, and that it couldn't sustain its self.

PEJACK: You mention some significant developments during your time here at Pacific, such as renovation of Anderson and bringing computer science into your program. Any other things you can add to that list?

DUNMIRE: Well, moving to Anderson did make a great difference to the department and to the School of Engineering. I mean, in Electrical and Computer Engineering especially. We had more office space and they were in close proximity. The construction of Khoury Hall and the starting of the Mechanical Engineering Department had a great influence in what we did here.

PEJACK: As the department chair here at Pacific you and I both know that we have teaching duties as well as administrative duties and so we end up having a lot of interaction with students in the teaching and advising areas. Do you have anything to comment on that? Any students that you remember particularly who they were and what they did.

DUNMIRE: Yes, there were many students that influenced me but I don't feel I should try naming them at this point. The Society of Women Engineers was formed. George Schroeder was the first engineering faculty advisor. This was a very lively energetic group. I enjoyed the interactions with SWE. They has cook-off contests where everyone participated and food was judged. We had a number of students who came from Hawaii and one of them had a straight A average. I recall he maintained that GPA throughout the program here at UOP. He went on to graduate school at MIT and graduated with high honors there. He worked most of his professional life at HP. When he retired he returned to Hawaii and manages several Hotels on the islands. We have kept in contact on and off over the years. There are other students who I've maintained contact with over the years and they have been special in my life. I enjoyed advising students in general. Of course there are always difficulties. I remember one of the students who basically had his program outlined when he entered my office (which was quite unusual) and said this is what I want to do, and we made some minor adjustments to the program and he went away. He followed his plan up until his senior year. He found some other interests on campus and did not complete the degree program which was a big disappointment for him and me. I've had contact with him since. He has gone on to be a very successful contractor in the Bay Area, and has come back wanting to finish his program but never found time to do so. I was advisor for the student branch of the Institute of Electrical and Electronic Engineers. I started the Eta Kappa Nu Honors Society for Electrical and Computer Engineering

students here. That was an interesting situation. I had a contact with a friend that I'd gone to graduate school with at the University of Wyoming. He agreed to come here from the University of North Dakota to install our chapter. I think it was in February when we started the program. As it happens they had a terrible snow storm, and he was unable to make the plane connections, and so we had to go ahead without him. Cliff Hand filled in on short notice and served as the main speaker during the installation of this program, and I certainly appreciated his willingness to fill in in that case.

PEJACK: Did you find that student attitudes and demeanor changed during all the years that you were at Pacific?

DUNMIRE: They certainly did. When we came it was a much smaller program and in electrical engineering only. As time went on, we initiated the computer engineering program which complicated things. Then as computers influenced the programs and we initiated courses involving them and the challenges they brought with them, we had a different group of students. I remember one of the students who was the first graduate from our computer engineering program. He was the son of professor Paul Winters who was well known on campus for his debate programs. I think Professor Winters came back and got an honor a couple of years ago, and I went to that meeting. I got to see his son again at that time. He has become a mainstay for the company that he works for in Washington State.

PEJACK: Pacific's growth and development over the years, what was the driving force behind those?

DUNMIRE: Well, I think that the University of the Pacific has become better known in many circles. I remember one story that influenced me early on. When Bob Heyborne was asked to come to UOP as the dean of the school of engineering, and when he was trying to make up his mind whether he would come, he called his advisor at Stanford and ask, what do you know of the School of Engineering at UOP? What's it known for? And his advisor couldn't think of anything, so he put the phone down and called his wife... What do we know about the University of the Pacific? He heard the reply, "Well, it has a great Conservatory of Music".

PEJACK: What's your overall view of how Pacific met what you expected? Is there any way that it did not meet your expectation?

DUNMIRE: I am glad that I came here. I've enjoyed the interactions with all the students and the faculty. I was permitted to teach and interact with students in their everyday lives. A faculty member I admire is Jim Morgali who retired from the Civil Engineering Department. Jim certainly influenced my thinking and I was glad to be a colleague of his. I have also enjoyed my association with Bob Hamernik especially since we were chairs of the departments in the school for so many years. Also my son not only graduated in electrical engineering but has gone on to

have a successful career in electrical engineering and in business. I certainly enjoyed the time I shared with the Emeriti Society and all of the interactions with the people that are associated with that group.

PEJACK: Well Dale, we've been chatting here about a lot of things with your career here at Pacific. Anything that we didn't touch upon yet that you want to add?

DUNMIRE: Carlynn and I have enjoyed the women's volleyball program over the years. We remember when we could walk across the street to the old gym when they were just starting the volleyball program. It was fun to watch then, and we have stayed with it over the years. We feel that our lives have been enhanced by being part of the University and all of its activities.

PEJACK: The women's volleyball team had some really good years in the early years as I recall.

DUNMIRE: It certainly did.

PEJACK: If I'm not mistaken weren't there a few engineers in that program over the years.

DUNMIRE: Yes, we had a number of young ladies who graduated with engineering degrees as part of the program. A real challenge to play volleyball and carry a full course load in engineering.

End Tape